

Customer No. 22,852  
Attorney Docket No. 02508,0092

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
)  
Thierry CROST et al. )  
) Group Art Unit:  
Serial No.: Not Yet Assigned )  
) Examiner:  
Filed: September 27, 2001 )  
)  
For: NON-THROMBOGENIC )  
SEMIPERMEABLE )  
MEMBRANE AND METHOD )  
FOR MAKING SAME )

L. Parks  
9-18-02  
#5/IDS

U.S. NATIONAL PHASE APPLICATION BASED ON PCT/FR01/00248

Assistant Commissioner for Patents  
Washington, DC 20231  
BOX: PCT

Sir:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§1.56 and 1.97(b), applicants bring to the Examiner's attention the documents listed on attached Form PTO-1449 and cited in the international search report. Copies of the listed documents are attached. Applicants respectfully request that the Examiner consider the documents listed on attached Form PTO-1449 and indicate that they were considered by making an appropriate notation on this form.

This Information Disclosure Statement is being filed with the above-referenced application.

The following documents listed on Form PTO-1449 are in a language other than English.



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1. DE 4240681 A1;
2. EP 0925826 A1 - The relevance of this document is discussed in corresponding U.S. Patent 6,177,013, a copy of which is enclosed. The relevance of this document is also shown in the enclosed English-language international search report from the European Patent Office in the international application from which this national phase U.S. application is derived;
3. EP 0 878 491 A2;
4. C. Charbonnel et al., "A DIALYSE SANS HÉPARINE", Session Nationale, pp. 10-11, (1994);
5. Dr. Ph. MORINIÈRE, "ANTICOAGULATION DES CIRCULATIONS EXTRA-CORPORELLES POUR ÉPURATION EXTRA-RÉNALE", Rappels sur l'hémostase et ses tests, pp. 1-39, (1998);
6. G. Soula, "LE COLLAGÈNE MODIFIÉ EMPÊCHE L'ADHÉSION DES TISSUS", Industries et Techniques, No. 804, pp. 66-68, (1999); and
7. J. Pélissié, "HÉPARINISATION DE SURFACE", RMB, Vol. 16, pp. 290-291, (1994).

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and

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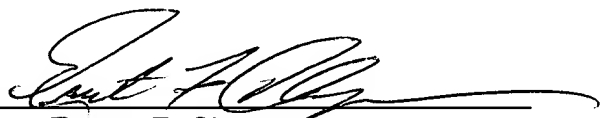
applicants determine that the cited documents do not constitute "prior art" under United States law, applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents. Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: September 27, 2001

By:   
Ernest F. Chapman  
Reg. No. 25,961

Enclosures  
EFC/FPD/peg

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INFORMATION DISCLOSURE CITATION

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U.S. PATENT DOCUMENTS

Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate
	4,749,619	6/7/88	Angleraud	428	398	
	5,840,190	11/24/98	Scholander et al.	210	500.24	
	5,015,226	5/14/91	Polaschegg	604	4	
	6,177,013	1/23/01	Thomas et al.	210	650	
	5,632,897	5/27/97	Mathieu	210	645	
	4,800,016	1/24/89	Yang	210	206	
	5,709,993	1/20/98	Buturovic-Ponikvar	435	2	
	5,885,609	3/23/99	Amiji	424	425	
	5,718,726	2/17/98	Amon et al.	623	2	
	5,421,815	6/6/95	Noguchi et al.	604	4	
	5,637,081	6/10/97	Noguchi et al.	604	4	
	5,820,917	10/13/98	Tuch	427	2.1	
	5,679,659	10/21/97	Verhoeven et al.	514	56	
	5,672,638	9/30/97	Verhoeven et al.	523	112	

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Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
42 40 681 A1 /	6/9/94	Germany			No
0 925 826 A1 /	6/30/99	Europe			No
0 769 503 A2 /	4/23/97	Europe			
WO98/53829 /	12/3/98	WIPO/PCT			
WO98/08552 /	3/5/98	WIPO/PCT			
0 878 491 A2 /	11/18/98	Europe			No
WO98/10805 /	3/19/98	WIPO/PCT			
WO98/10806 /	3/19/98	WIPO/PCT			

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FOREIGN PATENT DOCUMENTS						
	Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
	WO98/46288 ✓	10/22/98	WIPO/PCT			
	0 282 091 A2 ✓	9/14/88	Europe			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
	T. Masai et al., "EXPERIMENTAL EVALUATION OF TERUMO <sup>R</sup> HEPARIN-COATED SYSTEM FOR HEPARINLESS ECMO USING A VERY LOW BLOOD FLOW MODEL", Osaka University, Thermo Corp., Japan, 1 page, (1994). ✓
	R.J. Caruana et al., "ANTICOAGULATION", Handbook of Dialysis, 2 <sup>nd</sup> Edi., pp. 121-136 and 160-163. ✓
	J. Vienken et al., "INTERACTIONS OF HEPARIN WITH POSITIVELY-CHARGED MEMBRANES ALLOW HEPARIN-FREE DIALYSIS", Asaio, 12 pages, (1994). ✓
	K. Eya et al., "TOTAL HEART-LUNG REPLACEMENT WITH AN ARTIFICIAL HEART-LUNG SYSTEM", ASAIO, 1 page, 1994. ✓
	K. AL-LAMEE et al., "NEW METHODS FOR SURFACE MODIFICATION AND COVALENT ATTACHMENT OF HEPARIN", Medical Device Technology, pp. 24-27, (1998). ✓
	A. USUI, et al., "HEPARIN COATING EXTENDS THE DURABILITY OF OXYGENATORS USED FOR CARDIOPULMONARY SUPPORT", Artificial Organs, pp. 840-844, (1999). ✓
	R.H. BARTH, et al., "HEPARIN-FREE HEMODIALYSIS WITH A POLYACRYLONITRILE MEMBRANE", Trans Am Soc Artif. Intern Organs, pp. 597-600, (1989). ✓
	H.W.M. TEN HOOPEN et al., "STERILIZATION OF HEPARINIZED CUPROPHAN HEMODIALYSIS MEMBRANES", Journal of Materials Science: Materials in Medicine, Vol. 7, pp. 699-704, (1996). ✓
	G. REMUZZI, M.D., "AN69 MEMBRANE FOR HEMODIALYSIS: LONG TERM EFFECTS ON THE UREMIC HEMOSTATIC ABNORMALITIES", 1 <sup>st</sup> American AN69 Membrane Scientific Exchange, pp. 83-89, (1982). ✓
	S.K. MUJAIS et al., "HEPARIN FREE HEMODIALYSIS USING HEPARIN COATED HEMOPHAN", ASAIO Journal, Vol. 42, pp. M538-M541, (1996). ✓
	O. Larm, et al., "A NEW NON-THROMBOGENIC SURFACE PREPARED BY SELECTIVE COVALENT BINDING OF HEPARIN VIA A MODIFIED REDUCING TERMINAL RESIDUE", Biomat., Med. Dev., Art. Org., Vol. 11 (2&3), pp. 161-173 (1983). ✓
	C. CHARBONNEL et al., "A DIALYSE SANS HÉPARINE", Session Nationale, pp. 10-11, (1994). ✓
	Dr. Ph. MORINIÈRE, "ANTICOAGULATION DES CIRCULATIONS EXTRA-CORPORELLES POUR ÉPURATION EXTRA-RÉNALE, Rappels sur l'hémostase et ses tests, pp. 1-39, (1998). ✓

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	J. Pélissié, "HÉPARINISATION DE SURFACE", RMB, Vol. 16, pp. 290-291, (1994). ✓
	Baxter, "THE CONSIDERED APPROACH TO HAEMOFILTRATION," A brochure from Baxter (6 pages). ✓
	Baxter, "NEW FRONTIERS IN BIOCOMPATIBILITY", Baxter Healthcare Corporation, (7 pages) (1996).

Examiner	Date Considered
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ✓	
Form PTO 1449	Patent and Trademark Office - U.S. Department of Commerce